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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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VIERRA MAGEN MARCUS & DENIRO LLP			HANNETT, JAMES M	
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SAN FRANCISCO, CA 94105			PAPER NUMBER	

2612

DATE MAILED: 01/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/844,524	Applicant(s) HONEY ET AL.	
	Examiner James M. Hannett	Art Unit 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 18-20, 37-39 and 41-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-20 is/are allowed.
- 6) ☒ Claim(s) 37-39 and 41-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/27/2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/28/2005 has been entered.

### ***Response to Arguments***

Applicant's arguments filed 10/28/2005 have been fully considered but they are not persuasive.

The applicant asserts that in the telephonic interview conducted 10/25/2005, the examiner agreed that the proposed limitation of "said step of adding includes determining whether said video includes an occlusion of said location's position using image analysis" distinguished the cited prior art.

The examiner disagrees with the applicants characterization of what was agreed upon during the interview. The examiner points out in the interview summary the substance of interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments was as follows

" The applicant proposed to the examiner an amendment to claims 37-39 and 41-43 in which a combination of image pattern recognition and sensors that do not use pattern recognition are used. The examiner informed the applicant that amending the claims in such a way appear to

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overcome the current grounds of rejection, since DiCicco et al teaches using image pattern recognition or X-Y gyroscopic sensors and does not teach the use of both in a single system.”

This claim language discussed in the interview is not the claim language currently amended in the case of “ the step of adding includes determining whether said video includes an occlusion of said location’s position using image analysis”. Furthermore, the examiner asserts that DiCicco et al teaches on Column 9, Lines 42-67 the step of adding includes determining whether said video includes an occlusion of said location’s position using image analysis.

The applicant argues that DiCicco teaches away from using field of view data from sensors to add a line to the video. The applicant further asserts the it is improper for the examiner to pick and choose from features of the prior systems described in the background section of DiCicco and combine them with the invention of the detailed description. The applicant asserts that doing so renders the invention inferior to the invention described in the preferred embodiment of DiCicco.

The examiner disagrees with the applicant. The examiner points out that although DiCicco et al teaches that the preferred method of determining field of view data is performed using image pattern recognition, DiCicco teaches on Column 1, Lines 48-67 that it was common practice in the art at the time the invention was made to determined the field of view data using X and Y gyroscopic sensors. Although using the gyroscopic sensors makes the invention have increased jitter, one of ordinary skill in the art would have been motivated to produce the system without using image recognition in order to avoid paying the for the costly image recognition processing circuitry included in the camera of DiCicco et al. Furthermore, as discussed in the

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interview conducted 10/25/2005 the examiner referred the applicant to Chapter 2100 section 2123 of the MPEP related to this argument.

MPEP 2123 [R-3] states Rejection Over Prior Art's Broad Disclosure Instead of Preferred Embodiments

>I. < PATENTS ARE RELEVANT AS PRIOR ART FOR ALL THEY CONTAIN "The use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned. They are part of the literature of the art, relevant for all they contain." In re Heck, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)). A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art, including nonpreferred embodiments. Merck & Co. v. Biocraft Laboratories, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989). See also Celeritas Technologies Ltd. v. Rockwell International Corp., 150 F.3d 1354, 1361, 47 USPQ2d 1516, 1522-23 (Fed. Cir. 1998) (The court held that the prior art anticipated the claims even though it taught away from the claimed invention. "The fact that a modem with a single carrier data signal is shown to be less than optimal does not vitiate the fact that it is disclosed.").

II. < NONPREFERRED >AND ALTERNATIVE< EMBODIMENTS CONSTITUTE PRIOR ART

Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. In re Susi, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). "A known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use." In re Gurley,

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27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994) (The invention was directed to an epoxy impregnated fiber-reinforced printed circuit material. The applied prior art reference taught a printed circuit material similar to that of the claims but impregnated with polyester-imide resin instead of epoxy. The reference, however, disclosed that epoxy was known for this use, but that epoxy impregnated circuit boards have “relatively acceptable dimensional stability” and “some degree of flexibility,” but are inferior to circuit boards impregnated with polyester-imide resins. The court upheld the rejection concluding that applicant’s argument that the reference teaches away from using epoxy was insufficient to overcome the rejection since “Gurley asserted no discovery beyond what was known in the art.” 27 F.3d at 554, 31 USPQ2d at 1132.). >Furthermore, “[t]he prior art’s mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed....” In re Fulton, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004).<

The applicant argues that DiCicco does not teach the use of determining a locations position using a first process and performs a second process to refine the positions location, wherein the first step is different form the second step. The applicant further argued that the cited paragraphs by the examiner do not teach this limitation. Furthermore, the applicant argues that DiCicco only teaches a one step process.

The examiner disagrees with the applicant and points out that the Column 6, Lines 15-67 as cited by the examiner was discussion describing the process of determining a locations position. Furthermore, this discussion was continued onto Column 7, Lines 1-31. Specifically, DiCicco teaches on Column 12-27 that the determination is performed by four levels of

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decimation. In which each level has a different resolution. These four levels or refinement are viewed by the examiner as a first and a second step. The examiner points out that the two step process of Claim 41 does not state that one of the processes is performed based on X and Y gyroscopic sensor data and the other based on image pattern recognition.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- 1: Claims 37-39 and 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,892,554 DiCicco et al in view of USPN 5,264,933 Rosser et al.
- 2: As for Claim 37, DiCicco et al teaches in the abstract and on Column 6, Lines 15-67 and Column 2, Lines 28-35 a method for adding a graphic to a broadcast of a football game during a broadcast of the football game, comprising the steps of: storing an indication of a location of landmarks, determining the locations position in the video; and adding a static image or indicia to the video at the locations position in the video. DiCicco et al teaches on Column 8, lines 65-67 and Column 9, Lines 1-6 the step of adding includes adding the static image or indicia to one or more portions of the video that are not occluded and not adding the static image or indicia to one or more portions of the video that are occluded. DiCicco et al teaches a system in which an advertisement can be inserted onto the surface of a stadium. DiCicco et al teaches on Column 9, Lines 42-67 the step of adding includes determining whether said video includes an occlusion of said location's position using image analysis. DiCicco et al teaches sensing field of view data.

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The field of view data is viewed by the examiner as the captured video by the video camera in the current image. The landmarks that are captured are in the current field of view of the video camera. DiCicco et al teaches on Column 2, Lines 27-35 that the current field of view is determined by using pattern recognition by comparing the location of landmarks in the current image to the location of landmarks in the reference image. However, DiCicco does not teach that the field of view data for the camera is based on one or more field of view sensors that do not use pattern recognition. DiCicco teaches on Column 1, Lines 48-67 that it was well known in the art at the time the invention was made to use pan and tilt sensors (instead of pattern recognition) that were installed in a video camera to detect the current field of view of the camera.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use pan and tilt sensors (instead of pattern recognition) that were installed in a video camera to detect the current field of view of the camera in order to decrease cost by not including the complex pattern recognition circuitry that allows DiCicco to detect the landmarks. However, DiCicco et al does not teach that the step of modifying includes highlighting a portion of a playing field.

Rosser et al teaches a system that can insert indicia into a surface during a live event. Rosser et al teaches on Column 5, Lines 35-43 that it is advantageous to artificially mark the various field lines in a football game in order to enhance the appearance of a live event.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the system of DiCicco et al to highlight the various field lines in a football game as taught by Rosser et al in order to enhance the appearance of a live event.



Rosser et al does not state that the yard line that indicates the first down can be highlighted. However, Official notice is taken that it was well known in the art at the time the invention was made that a first-down yard line was a well known field line in a football game at the time the invention was made.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the invention of DiCicco et al in view of Rosser et al to highlight the first down marker since Rosser et al teaches that it is advantageous to artificially mark the various field lines in a football game and it was well known in the art at the time the invention was made that a first-down yard line was a well known field line in a football game.

3: In regards to Claim 38, DiCicco et al teaches in the abstract and on Column 6, Lines 15-67 and Column 2, Lines 28-35 a method for adding a graphic to a video of a football game during a broadcast of the football game, comprising the steps of: storing an indication of a location of landmarks, determining the locations position in the video; and adding a static image or indicia to the video at the locations position in the video. DiCicco et al teaches on Column 8, lines 65-67 and Column 9, Lines 1-6 the step of adding includes adding the static image or indicia to one or more portions of the video that are not occluded and not adding the static image or indicia to one or more portions of the video that are occluded. DiCicco et al teaches a system in which an advertisement can be inserted onto the surface of a stadium. DiCicco et al teaches sensing field of view data. The field of view data is viewed by the examiner as the captured video by the video camera in the current image. The landmarks that are captured are in the current field of view of the video camera. DiCicco et al teaches on Column 2, Lines 27-35 that the current field of view is determined by using pattern recognition by comparing the location of

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landmarks in the current image to the location of landmarks in the reference image. However, DiCicco does not teach that the field of view data for the camera is based on one or more field of view sensors that do not use pattern recognition. DiCicco teaches on Column 1, Lines 48-67 that it was well known in the art at the time the invention was made to use pan and tilt sensors (instead of pattern recognition) that were installed in a video camera to detect the current field of view of the camera.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use pan and tilt sensors (instead of pattern recognition) that were installed in a video camera to detect the current field of view of the camera in order to decrease cost by not including the complex pattern recognition circuitry that allows DiCicco to detect the landmarks. However, DiCicco et al does not teach that the step of modifying includes highlighting a portion of a playing field.

Rosser et al teaches a system that can insert indicia into a surface during a live event. Rosser et al teaches on Column 5, Lines 35-43 that it is advantageous to artificially mark the various field lines in a football game in order to enhance the appearance of a live event.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the system of DiCicco et al to highlight the various field lines in a football game as taught by Rosser et al in order to enhance the appearance of a live event.

Rosser et al does not state that the yard line that indicates the first down can be highlighted. However, Official notice is taken that it was well known in the art at the time the invention was made that a first-down yard line was a well known field line in a football game at the time the invention was made.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the invention of DiCicco et al in view of Rosser et al to highlight the first down marker since Rosser et al teaches that it is advantageous to artificially mark the various field lines in a football game and it was well known in the art at the time the invention was made that a first-down yard line was a well known field line in a football game.

4: As for Claim 39, DiCicco et al teaches in the abstract and on Column 6, Lines 15-67 and Column 2, Lines 28-35 a method for adding a graphic to a video of a football game during a broadcast of the football game, comprising: It is inherent that the system of DiCicco contain a storage device to store the reference image. DiCicco et al teaches on Column 2, Lines 27-30 a processing unit in communication with the storage device, the storage device stores data for the processing unit, the processing unit is capable of performing a method comprising the steps of: storing an indication of a location of landmarks, determining the locations position in the video; and adding a static image or indicia to the video at the locations position in the video. DiCicco et al teaches on Column 8, lines 65-67 and Column 9, Lines 1-6 the step of adding includes adding the static image or indicia to one or more portions of the video that are not occluded and not adding the static image or indicia to one or more portions of the video that are occluded. DiCicco et al teaches a system in which an advertisement can be inserted onto the surface of a stadium. DiCicco et al teaches sensing field of view data. The field of view data is viewed by the examiner as the captured video by the video camera in the current image. The landmarks that are captured are in the current field of view of the video camera. DiCicco et al teaches on Column 2, Lines 27-35 that the current field of view is determined by using pattern recognition by comparing the location of landmarks in the current image to the location of landmarks in the

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reference image. However, DiCicco does not teach that the field of view data for the camera is based on one or more field of view sensors that do not use pattern recognition. DiCicco teaches on Column 1, Lines 48-67 that it was well known in the art at the time the invention was made to use pan and tilt sensors (instead of pattern recognition) that were installed in a video camera to detect the current field of view of the camera.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use pan and tilt sensors (instead of pattern recognition) that were installed in a video camera to detect the current field of view of the camera in order to decrease cost by not including the complex pattern recognition circuitry that allows DiCicco to detect the landmarks. However, DiCicco et al does not teach that the step of modifying includes highlighting a portion of a playing field.

Rosser et al teaches a system that can insert indicia into a surface during a live event. Rosser et al teaches on Column 5, Lines 35-43 that it is advantageous to artificially mark the various field lines in a football game in order to enhance the appearance of a live event.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the system of DiCicco et al to highlight the various field lines in a football game as taught by Rosser et al in order to enhance the appearance of a live event.

Rosser et al does not state that the yard line that indicates the first down can be highlighted. However, Official notice is taken that it was well known in the art at the time the invention was made that a first-down yard line was a well known field line in a football game at the time the invention was made.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the invention of DiCicco et al in view of Rosser et al to highlight the first down marker since Rosser et al teaches that it is advantageous to artificially mark the various field lines in a football game and it was well known in the art at the time the invention was made that a first-down yard line was a well known field line in a football game.

5: As for Claim 41, DiCicco et al teaches in the abstract and on Column 6, Lines 15-67 and Column 2, Lines 28-35 a method for adding a graphic indication to a broadcast of a football game during a broadcast of a football game, comprising the steps of: storing an indication of a location on a football field; sensing field of view data for a camera; receiving video from the camera; determining the location's position in the video using a first step process that makes use of the field of view data; performing a second step process to refine the location's position in the video, the second step process is different than the first step process. DiCicco et al teaches on Column 8, lines 65-67 and Column 9, Lines 1-6 the step of adding includes adding the static image or indicia to one or more portions of the video that are not occluded and not adding the static image or indicia to one or more portions of the video that are occluded. DiCicco et al teaches a system in which an advertisement can be inserted onto the surface of a stadium. DiCicco et al teaches sensing field of view data. The field of view data is viewed by the examiner as the captured video by the video camera in the current image. The landmarks that are captured are in the current field of view of the video camera. DiCicco et al teaches on Column 2, Lines 27-35 that the current field of view is determined by using pattern recognition by comparing the location of landmarks in the current image to the location of landmarks in the reference image. However, DiCicco does not teach that the field of view data for the camera is

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based on one or more field of view sensors that do not use pattern recognition. DiCicco teaches on Column 1, Lines 48-67 that it was well known in the art at the time the invention was made to use pan and tilt sensors (instead of pattern recognition) that were installed in a video camera to detect the current field of view of the camera

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use pan and tilt sensors (instead of pattern recognition) that were installed in a video camera to detect the current field of view of the camera in order to decrease cost by not including the complex pattern recognition circuitry that allows DiCicco to detect the landmarks. However, DiCicco et al does not teach that the step of modifying includes highlighting a portion of a playing field.

Rosser et al teaches a system that can insert indicia into a surface during a live event. Rosser et al teaches on Column 5, Lines 35-43 that it is advantageous to artificially mark the various field lines in a football game in order to enhance the appearance of a live event.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the system of DiCicco et al to highlight the various field lines in a football game as taught by Rosser et al in order to enhance the appearance of a live event.

Rosser et al does not state that the yard line that indicates the first down can be highlighted. However, Official notice is taken that it was well known in the art at the time the invention was made that a first-down yard line was a well known field line in a football game at the time the invention was made.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the invention of DiCicco et al in view of Rosser et al to highlight the

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first down marker since Rosser et al teaches that it is advantageous to artificially mark the various field lines in a football game and it was well known in the art at the time the invention was made that a first-down yard line was a well known field line in a football game.

6: In regards to Claim 42, DiCicco et al teaches on Column 1, Lines 48-67 the use of both X and Y sensors. Therefore, the process of determining the location based on the first sensor is viewed as the data pertaining to the X sensor and the second process of refining is viewed as the process of determining the location based on the Y sensor data.

7: As for Claim 43, DiCicco et al teaches on Column 1, Lines 48-67 the use of both X and Y sensors. Therefore, the process of determining the location based on the first sensor is viewed as the data pertaining to the X sensor and the second process of refining is viewed as the process of determining the location based on the Y sensor data.

#### *Allowable Subject Matter*

8: Claims 18-20 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not teach the method for enhancing the broadcast of a target at a live event by capturing a first frame of video which is viewed as the reference image using a first camera and capturing a second frame of video which is viewed as the video of the live event using a second camera. Furthermore, the prior art does not teach that the first and second cameras can be placed adjacent to each other to broadcast a live event.

#### *Conclusion*

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M. Hannett whose telephone number is 571-272-7309.

The examiner can normally be reached on 8:00 am to 5:00 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc Yen Vu can be reached on 571-272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James M. Hannett  
Examiner  
Art Unit 2612



JMH  
January 23, 2006



NGOC-YEN VU  
PRIMARY EXAMINER